EAST Search History / Interference Search

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	166	dividing wall column	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:38
L2	2372	toluenediamine	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:38
L3	2	L2 and L1	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:38
L4	1	"20070083065"	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:39
L5	3538355	high	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:39
L6	1	L5 and L4	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:39
L7	0	seperating wall column	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:39
L8	11	separating wall column	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:39
L9	2968	tda	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:40
L10	5078	l9 or l2	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:40
L11	175	l1 or l8	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:40
L12	6	l11 and l10	US-PGPUB; USPAT	ADJ	ON	2007/09/25 07:40

EAST Search History / INTERFERENCE SEARCH

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"20070083065"	US-PGPUB; USPAT	ADJ	ON	2007/09/25 06:30
L2	3538355	high	US-PGPUB; USPAT	ADJ	ON	2007/09/25 06:30
L3	1	l2 and l1	US-PGPUB; USPAT	ADJ	ON	2007/09/25 06:36
L4	166	dividing wall column	US-PGPUB; USPAT	ADJ	ON	2007/09/25 06:36
L5	2968	tda or toluylenediame	US-PGPUB; USPAT	ADJ	ON	2007/09/25 06:36
L6	5	l5 and l4	US-PGPUB; USPAT	ADJ	ON	2007/09/25 06:36

CAS ONLINE PRINTOUT

> d his

(FILE 'HOME' ENTERED AT 06:45:33 ON 25 SEP 2007)

FILE 'REGISTRY' ENTERED AT 06:45:53 ON 25 SEP 2007

FILE 'CAPLUS' ENTERED AT 06:45:59 ON 25 SEP 2007
E US20070083065/PN
L1 1 S E3
L2 784 S TOLUENEDIAMINE/IT
L3 70602 S ENGINEERING/IT
L4 0 S L3 AND L2
L5 38932 S DISTILLATION/IT
L6 5 S L2 AND L5

=> d bib abs it 1-5

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2007:63639 CAPLUS
DN 146:162903
TI Hydrogenation and distillation process for the preparation of toluenediamines
IN Pennemann, Bernd; Brady, Bill; Buse, Rainer; Greger, Gerd
PA Bayer Materialscience AG, Germany
SO U.S. Pat. Appl. Publ., 12pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2007015940	A1	20070118	US 2006-482404	20060707
	DE 102005032430	A1	20070125	DE 2005-102005032430	20050712
	EP 1746083	A1	20070124	EP 2006-13434	20060629
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	CN 1896047	A	20070117	CN 2006-10105898	20060711
	KR 2007008414	A	20070117	KR 2006-64732	20060711
	JP 2007023033	A	20070201	JP 2006-190679	20060711
PRAI	DE 2005-102005032430	A	20050712		

AB Toluenediamine is produced and separated from byproducts of the reaction by: (a) hydrogenating dinitrotoluenes in the presence of a catalyst; (b) separating the catalyst, water and optional solvent from the hydrogenation reaction mixture to give crude toluenediamines; and (c) separating, by distillation, the crude toluenediamines in a separating-wall column into at least four product streams P1, P2, P3, and P 4. Product stream P1 is a stream containing low boilers. Product stream P2 is a stream containing o-toluenediamine. Product stream P3 is a stream containing m-toluenediamine. Product stream P4 is a stream containing high boilers and m-toluenediamine. Process flow diagrams are presented.

IT Amines, preparation
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(aromatic, toluenediamines; hydrogenation and distillation process for the preparation of toluenediamines)

IT Nitro compounds
RL: RCT (Reactant); RACT (Reactant or reagent)
(dinitrotoluenes; hydrogenation and distillation process for the preparation of

toluenediamines)
IT Distillation
Hydrogenation
Hydrogenation catalysts
(hydrogenation and distillation process for the preparation of toluenediamines)
IT Isocyanates
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(m-TDI; preparation of)
IT Acylation
(phosgenation; of m-toluenediamine)
IT Distillation columns
(separating-wall column; hydrogenation and distillation process for the preparation of toluenediamines)
IT 95-70-5P, p-Toluenediamine
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PREP (Preparation); PROC (Process)
(distillation of)
IT 7732-18-5P, Water, preparation
RL: BYP (Byproduct); PEP (Physical, engineering or chemical process); REM (Removal or disposal); PREP (Preparation); PROC (Process)
(hydrogenation and distillation process for the preparation of toluenediamines)
IT 95-80-7P, m-Toluenediamine
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)
(hydrogenation and distillation process for the preparation of toluenediamines)
IT 26966-75-6P
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(hydrogenation and distillation process for the preparation of toluenediamines)
IT 25321-14-6, Dinitrotoluene
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(hydrogenation and distillation process for the preparation of toluenediamines)
IT 1333-74-0, Hydrogen, reactions
RL: PEP (Physical, engineering or chemical process); RGT (Reagent); PROC (Process); RACT (Reactant or reagent)
(hydrogenation and distillation process for the preparation of toluenediamines)
IT 26471-62-5P, Toluenediisocyanate
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 75-44-5, Phosgene
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(reaction of m-toluenediamine with)

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:638835 CAPLUS
DN 143:135243
TI Method for the distillative recovery of toluenediamines using a partition

CAS ONLINE PRINTOUT

distillation column

IN Knoesche, Carsten; Sohn, Martin; Penzel, Ulrich; Pallasch, Hans-Juergen; Georgi, Gunter; Mackenroth, Wolfgang; Schwarz, Hans Volkmar; Maixner, Stefan; Molz, Gerald; Stroefer, Eckhard

PA BASF Aktiengesellschaft, Germany

SO PCT Int. Appl., 17 pp.
CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005066113	A1	20050721	WO 2005-EP81	20050107
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 102004001456	A1	20050811	DE 2004-102004001456	20040108
	EP 1706370	A1	20061004	EP 2005-700737	20050107
	EP 1706370	B1	20070905		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
	CN 1910133	A	20070207	CN 2005-80002158	20050107
	JP 2007519638	T	20070719	JP 2006-548223	20050107
	US 2007083065	A1	20070412	US 2006-585648	20060707
PRAI	DE 2004-102004001456	A	20040108		
	WO 2005-EP81	W	20050107		

AB A method is presented for the distillative recovery of toluenediamines (TDA) from an educt flow containing TDA, high boilers, and low boilers in a partition column in which a partition is disposed in the longitudinal direction of the column so as to form a common upper column zone, a common bottom column zone, a feeding section that encompasses a rectification section and a stripping section, and a withdrawal section encompassing a rectification section and a stripping section. The distillation method comprises: (A) the educt flow is delivered to the feeding section of the partition column; (B) a low-boiler fraction is discharged via the top of the column; (C) TDA is discharged via a lateral discharge point located in the withdrawal section of the partition column; and (D) a high-boiler fraction is discharged via the bottom of the column. A process flow diagram is presented.

IT Amines, preparation
RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(diamines, aromatic, toluenediamines; method for the distillative recovery of toluenediamines using a partition distillation column)

IT Distillation
(method for the distillative recovery of toluenediamines using a partition distillation column)

IT Distillation columns
(partition; method for the distillative recovery of toluenediamines using a partition distillation column)

IT 95-80-7P, 2,4-Toluenediamine 823-40-5P, 2,6-Toluenediamine 26764-44-3P

RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(method for the distillative recovery of toluenediamines using a partition distillation column)

IT 95-53-4, o-Toluidine, processes 496-72-0, 3,4-Toluenediamine 7732-18-5, Water, processes
RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); PYP (Physical process); REM (Removal or disposal); PROC (Process)
(method for the distillative recovery of toluenediamines using a partition distillation column)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:985771 CAPLUS
DN 140:28151
TI Process for the purification of mixtures of toluene diisocyanate incorporating a dividing-wall distillation column
IN Brady, Bill; Steffens, Friedhelm; Keggenhoff, Berthold; Verkerk, Kai; Ruffert, Gerhard
PA Bayer A.-G., Germany
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1371633	A1	20031217	EP 2002-13460	20020614
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	EP 1371635	A1	20031217	EP 2003-12498	20030602
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CA 2431439	A1	20031214	CA 2003-2431439	20030609
	US 2003230476	A1	20031218	US 2003-457307	20030609
	US 7118653	B2	20061010		
	MX 2003PA05248	A	20040505	MX 2003-PA5248	20030612
	CN 1467202	A	20040114	CN 2003-141072	20030613
	JP 2004155760	A	20040603	JP 2003-168858	20030613
	BR 2003002097	A	20040908	BR 2003-2097	20030613
PRAI	EP 2002-13460	A	20020614		

AB A process for the purification of toluene diisocyanate (TDI), from a crude distillation feed comprising >2% phosgene, by separating the crude distillation feed in a dividing-wall distillation column into four product fractions (i.e., P1-P4): P1 is a phosgene-enriched, low-boiler product; P2 is a solvent-enriched product; P3 is a high boiler-enriched bottoms fraction; and P4 is a TDI product stream. Apparatus and process flow diagrams are presented.

IT Isocyanates
RL: EPR (Engineering process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PREP (Preparation); PROC (Process)
(aromatic, toluenediisocyanates; process for the purification of mixts. of toluene diisocyanate incorporating a dividing-wall distillation column)

IT Amines, reactions
RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(diamines, aromatic, toluenediamines; manufacture of TDI by phosgenation of)

CAS ONLINE PRINTOUT

IT Distillation columns
(dividing-wall; process for the purification of mixts. of toluene diisocyanate incorporating a dividing-wall distillation column)
IT Acylation
(phosgenation; of toluenediamine in the manufacture of TDI)
IT Distillation
(process for the purification of mixts. of toluene diisocyanate incorporating a dividing-wall distillation column)
IT 75-44-5, Phosgene
RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); PYP (Physical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(in a process for the purification of mixts. of toluene diisocyanate incorporating a dividing-wall distillation column)
IT 26764-44-3
RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(preparation of TDI from)
IT 26471-62-5P, TDI
RL: EPR (Engineering process); IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(process for the purification of mixts. of toluene diisocyanate incorporating a dividing-wall distillation column)
IT 71-43-2, Benzene, uses 95-50-1, 1,2-Dichlorobenzene 98-95-3, Nitrobenzene, uses 100-66-3, Anisole, uses 106-46-7, 1,4-Dichlorobenzene 108-88-3, Toluene, uses 108-90-7, Chlorobenzene, uses 1330-20-7, Xylene, uses
RL: EPR (Engineering process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(solvent; in a process for the purification of mixts. of toluene diisocyanate incorporating a dividing-wall distillation column)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:214928 CAPLUS
DN 136:249376
TI Stripping process for separating mixtures of materials having different boiling points
IN Brady, Bill L.; Weymans, Guenther; Keggenhoff, Berthold
PA Bayer Corporation, USA
SO U.S., 10 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6359177	B1	20020319	US 2000-738297	20001215
	CA 2431312	A1	20020620	CA 2001-2431312	20011212
	WO 2002048075	A1	20020620	WO 2001-US47907	20011212

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 200235184	A	20020624	AU 2002-35184	20011212
	EP 1349820	A1	20031008	EP 2001-985540	20011212
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2001016150	A	20031021	BR 2001-16150	20011212
	JP 2004524285	T	20040812	JP 2002-549612	20011212
	TW 567180	B	20031221	TW 2001-90130844	20011213
	MX 2003PA05274	A	20030925	MX 2003-PA5274	20030612
PRAI	US 2000-738297	A	20001215		
	WO 2001-US47907	W	20011212		

AB A mixture of materials having different b.ps. is separated into fractions having different b.ps. The separated fraction containing the desired product is stripped using the vapors of a lower boiling fraction. This process is particularly useful for recovering a desired isomer or isomer mixture from a tech. mixture obtained during production of an aromatic amine such as toluenediamines. Little or no unwanted isomer or byproduct is present in the isomer or isomer mixture product of this process; process flow diagrams are presented.

IT Amines, preparation
RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PUR (Purification or recovery); PREP (Preparation); PROC (Process)
(diamines, aromatic; stripping process for separating mixts. of materials having different b.ps.)

IT Distillation
Distillation columns
(stripping process for separating mixts. of materials having different b.ps. using)

IT Columns and Towers
(stripping; stripping process for separating mixts. of materials having different b.ps. using)

IT 95-70-5P, 2,5-Toluenediamine 95-80-7P, 2,4-Toluenediamine 496-72-0P, 3,4-Toluenediamine 823-40-5P, 2,6-Toluenediamine 2687-25-4P, 2,3-Toluenediamine 26764-44-3P
RL: EPR (Engineering process); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PUR (Purification or recovery); PREP (Preparation); PROC (Process)
(stripping process for separating mixts. of materials having different b.ps.)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1973:85297 CAPLUS
DN 78:85297
TI Fire-resistant urethane polymer foams
IN Dietrich, Werner; Grave, Heinrich; Liebsch, Dietrich; Pfirschke, Johannes; Richert, Karl Hartwig
PA Farbenfabriken Bayer A.-G.
SO Ger. Offen., 22 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2117575	A	19721019	DE 1971-2117575	19710410

	BE 781790	A1	19721009	BE 1972-116041	19720407
	NL 7204703	A	19721012	NL 1972-4703	19720407
	IT 954410	B	19730830	IT 1972-49447	19720407
	AT 312941	B	19740125	AT 1972-3014	19720407
	ES 401617	A1	19750216	ES 1972-401617	19720408
	ES 401618	A1	19750216	ES 1972-401618	19720408
	FR 2132828	A5	19721124	FR 1972-12510	19720410
	GB 1365629	A	19740904	GB 1972-16337	19720410
PRAI	DE 1971-2117575	A	19710410		

AB The residue from the distillation of the product mixture from the phosgenation of tolylenediamine (I, containing mostly 2,4-and 2,6-isomers) was mixed with tolylene diisocyanate (II, contg 2,4- and (or) 2,6-isomers) and treated with water and castor oil polyethylene glycol polyether, with morpholine and methyl p-toluenesulfonate, or with 2,5-dichloro-1,4-phenylenediamine to give a polyisocyanate in which 5-25 weight% of the NCO groups had been converted to biuret groups, and which was used to prepare the title foams. Thus, the residue from the distillation of the product from the phosgenation of I (containing >0.5, .sim.65, and .sim.35% ortho, 2,4, and 2,6 isomers, resp.) was mixed with II (contg 80% 2,4- and 2,6-isomers and castor oil polyethylene glycol polyether, heated 60 min at 85.deg. while water was added and the product mixture heated 2 hr at 170.deg. to give a biuret group-containing polyisocyanate of 1500 cP at 25.deg. and 34.7% NCO content. A mixture containing poly(propylene oxide) [25322-69-4] of OH number 395, endo-ethylenepiperazine, CFCl3, and the above prepared polyisocyanate was stirred at a high speed and hardened to give a foam of d. 28 kg/m3, compression strength 1.0 kg/cm2, and softening point 130.deg..

IT Urethane polymers, preparation
RL: PREP (Preparation)
(cellular, from methylphenylene isocyanate preparation distillation residue reaction products containing biuret groups)

IT Castor oil
RL: PREP (Preparation)
(ethers with polyethylene glycol, reaction products with methylphenylene isocyanate preparation distillation residues, biuret group-containing,
polyurethane foam manufacture from)

IT Fire-resistant materials
(polyurethane foams, containing biuret groups)

IT 110-91-8D, Morpholine, reaction products with methyl-m-phenylene isocyanate preparation distillation residues 20103-09-7D, 1,4-Benzenediamine, 2,5-dichloro-, reaction products with methyl-m-phenylene isocyanate preparation distillation residues 25322-68-3D, Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, ether with castor oil, reaction products with methyl-m-phenylene isocyanate preparation distillation residues
RL: USES (Uses)
(biuret group-containing, polyurethane foam manufacture from)

IT 108-19-0DP, Imidodicarbonic diamide, derivs.
RL: PREP (Preparation)
(polyisocyanates containing, preparation of, and polyurethane foam manufacture from)

IT 26471-62-5P
RL: PREP (Preparation)
(preparation of, distillation residues from, polyurethane foam manufacture from)

IT 823-40-5
RL: USES (Uses)
(reaction of 2,4-toluenediamine-containing, with phosgene, distillation residues from, polyurethane foam manufacture from)

IT 95-80-7

CAS ONLINE PRINTOUT

RL: USES (Uses)
(reaction of 2,6-toluenediamine-containing, with phosgene, distillation residues from, polyurethane foam manufacture from)

IT 75-44-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with toluenediamines in polyisocyanate manufacture)

=>

CAS ONLINE PRINTOUT

```
=> d his

     (FILE 'HOME' ENTERED AT 06:45:33 ON 25 SEP 2007)

     FILE 'REGISTRY' ENTERED AT 06:45:53 ON 25 SEP 2007

     FILE 'CAPLUS' ENTERED AT 06:45:59 ON 25 SEP 2007
                E US20070083065/PN
L1            1 S E3
L2          784 S TOLUENEDIAMINE/IT
L3        70602 S ENGINEERING/IT
L4            0 S L3 AND L2
L5        38932 S DISTILLATION/IT
L6            5 S L2 AND L5
L7           40 S DIVIDING WALL COLUMN
L8            0 S L7 AND L2
L9          410 S TOLUYLENEDIAMINE
L10           0 S L9 AND L7
L11         398 S L9 NOT L2

=> s l9 and l5
L12           0 L9 AND L5

=>
```